II. Remarks

A. Introduction

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-20 are pending in the application, with Claims 1, 10 and 11 being independent.

Claims 1 and 11 have been amended to recite the level of the residual halogen being reduced to from 70 to 206 parts per million. Claim 10 has been amended to recite the level of the residual halogen being reduced to about 105 parts per million. Support for these amendments can be found at least at page 14, Table 1 and page 12 line 4-page 13, line 2. Claims 1, 10 and 11 have been amended to recite the level of residual Group IIIb metals being reduced to 0.1 or less parts per million. Support for this amendment can be found at least at page 14, Table 1 and page 12, line 4-page 13, line 2. Claims 1 and 10 have been amended to recite from 0.78-1.0 eq. metal/eq. halogen. Claim 10 has been amended to recite about 1.2 eq. metal/ eq. halogen. Support for this amendment can be found at least on page 14, Table 1 and page 12, line 8-page 13, line 2. Claims 1, 10 and 11 have been amended to recite the slurry being heated under a vacuum of at least 50 mmHg. Support for this amendment can be found at least at page 14, Table 1 and page 12, lines 7-8. Claims 1, 10 and 11 have been amended to recite a liquid poly (\alpha-\text{oleims}). Support for this amendment can be found at least at page 14, lines 9-10. Accordingly, no new matter has been added.

B. Board's Reversal

Applicants thank the Board for reversing the rejection under 35 U.S.C. §103(a). At the present time, there are no art rejections.

C. The Rejections Under 35 U.S.C. § 112, second paragraph, Should Be Withdrawn

1. Poly(α-olefins)

Claims 1-20 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly failing to particularly point out the claimed subject matter and/or for allegedly claiming subject matter that Applicants may not regard as their invention. Applicants traverse this rejection in view of the amended claims.

The Board's Decision states that Applicants do not identify any particular PAO in the specification and that one skilled in the art would not be able to reproduce the experiments reported in Examples 1 through 24. See Decision on Appeal, page 9. The independent claims have been amended to recite a <u>liquid</u> poly(α-olefin) polymerized in the presence of a catalyst comprising the halogen and Group IIIb metals. Further, U.S. Patent No. 4,122,126 to Taniyasu et al. (hereinafter "Taniyasu"), which is incorporated by reference into the present application, states that such catalysts are well known as polymerization catalysts suitable for use in the polymerization of olefin monomers such as, for example, hexene-1, octene-1, decene-1, 2-ethyloctene-1, tridecene-1, octadecene-1 and the like. (See Taniyasu at column 3, lines 38-41).

Therefore, one skilled in the art would recognize that the catalysts utilized in the present invention are utilized for a particular class of poly(α -olefins). As such, one skilled in the art would be able to reproduce the experiments reported in Examples 1 through 24, by using such a suitable poly(α -olefin), and, accordingly, the claims are not indefinite.

2. "Comparative" and "Invention" Examples

Claims 1-20 stand rejected under 35 U.S.C. § 112, second paragraph, as claiming subject matter that Applicants may not regard as their invention. Applicants traverse this rejection in view of the amended claims.

Applicants have amended Claims 1, 10 and 11 to clearly distinguish between the Comparative Examples and the invention shown in Table 1.

3. Vacuum Pressure

Claims 1-20 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out the claimed subject matter and/or for allegedly claiming subject matter that Applicants may not regard as their invention. In order to advance prosecution, Applicants traverse this rejection in view of the amended claims, by including the feature "heating the slurry under a vacuum of at least 50 mmHg."

4. Amount of Adsorbent

Claims 1-20 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out the claimed subject matter and/or for allegedly claiming subject matter that Applicants may not regard as their invention. In order to advance prosecution, Applicants traverse this rejection in view of the amended claims, by including

Response to Office Action Application No. 10/712,829

the feature "adding from 0.78-1.0 eq. metal/eq. halogen of an adsorbent," in Claims 1 and 11 and including the feature "adding about 1.2 eq. metal/eq. halogen of an adsorbent," in Claim 10.

5. Reducing Levels of Halogen and Group IIIb metals

Claims 1-20 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out the claimed subject matter. In order to advance prosecution, Applicants traverse this rejection in view of the amended claims by including parts per million levels provided in the application.

D. Conclusion

In view of the above, it is believed that this application is in condition for allowance, and a Notice thereof is respectfully requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3620. All correspondence should continue to be directed to the address given below.

Respectfully submitted

Attorney for Applicant Jeffrey T. Gerdzwill Registration No. 55,201

Please continue to direct all correspondence to: Patent Administrator Chemtura Corporation 199 Benson Road Middlebury, CT 06749 USA